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**(54) OPTICAL FIBER
SENSOR FOR DETECTING
TOPOGRAPHIC
DISPLACEMENT AND
LAYING METHOD FOR
THE SAME AND
TOPOGRAPHIC
DISPLACEMENT
DETECTING DEVICE
USING THE SAME**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an optical fiber sensor for detecting topographic displacement which has constant detecting sensitivity and which can specify a position where the topographic displacement is generated positively and a laying method of the same and a topographic displacement detecting device using the same.

SOLUTION: In an optical fiber sensor 6 for detecting topographic displacement to detect the topographic displacement from disconnection of an optical fiber 7 buried in a position to be the detecting position of topographic displacement, a linear member 10 which has designated strength is formed by previously hardening periphery of the optical fiber 7 with a solid material 9 and this linear member 10 is buried in a position to be the detecting position and the optical fiber 7 is disconnected by break of this linear member 10. The optical fiber 7 is disconnected when the linear member 10 is broken. Accordingly, detecting sensitivity becomes constant.

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